

REMARKS

Claims 1-15 have been canceled without prejudice or disclaimer. Claims 16-45 have been added and therefore are pending in the present application. Claims 16-45 are supported by claims 1-15. The mutations recited in claims 18, 20, 22, 24, 26, 28, 30, 32, 34, 36 and 38 are supported by page 8, lines 5-20 of the specification.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. Claim to Priority

The Office Action Summary acknowledged Applicants' claim for priority, but stated that none of the certified copies had been received. This is respectfully traversed.

The instant application is a national phase application filed under 35 USC 371. Applicants filed a certified copy of the priority application with the International Bureau. Applicants submit that they are not required to file a certified copy with the USPTO.

Under Rule 17.2 of the PCT which is recited in section 1828 of the MPEP, "[t]he International Bureau shall, at the specific request of the designated Office ... furnish a copy of the priority document to that Office. No such Office shall ask the applicant himself to furnish it with a copy...." Applicants respectfully request that the Office acknowledge receipt of the priority document in the next communication.

II. The Restriction Requirement

The Office maintained the restriction requirements. As provided in the prior response, the restriction requirement does not comply with the unity of invention standard. Furthermore, it is the Office's practice to examine variants modified at one or more positions in one application. See, e.g., U.S. Patent Nos. 6,197,567, 6,297,038 as well as Petersen et al., which has been cited by the Examiner.

For the foregoing reasons, Applicants request that the restriction requirement be withdrawn.

III. Specification

The Office requested clarification of the percent identity between SEQ ID NOS: 1 and 10. Applicants confirm that the specification is correct, they are 56.5% identical.

IV. The Rejection of Claim 2 under 35 U.S.C. 112

Claim 2 is rejected under 35 U.S.C. 112 as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is respectfully traversed.

The specification fully describes the laccase variants of the present invention. Based on Applicants' disclosure, the skilled artisan would be led to make other mutations in addition to the mutations recited in the claims to obtain the benefits described in the present application. Applicants therefore submit that the specification demonstrates that Applicants had possession of the claimed invention at the time the application was filed.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

V. The Rejections of Claim 2 under 35 U.S.C. 112

Claim 2 is rejected under 35 U.S.C. 112 because the specification is enabling for a variant of *Myceliophthora thermophila* having an amino acid sequence of SEQ ID NO: 10. In addition, the Office objected to the transition word "comprising." This rejection is respectfully traversed.

It is well settled that "a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken as in compliance with the enabling requirement of the first paragraph of section 112 unless there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support." In re Marzocchi, 169 U.S.P.Q. 367, 369 (C.C.P.A. 1971).

Moreover, "[a]ny assertion by the Patent Office that the enabling disclosure is not commensurate in scope with the protection sought must be supported by evidence or reasoning substantiating the doubts so expressed." In re Dinh-Nguyen, 181 U.S.P.Q. 46, 47 (C.C.P.A. 1974). Thus, the burden is upon the Patent Office to set forth reasonable grounds in support of its contention that a claim reads on inoperable subject matter). See In re Stark, 172 U.S.P.Q. 402, 406 n. 4 (C.C.P.A. 1972).

The specification describes laccases modified at specified positions. In addition, the specification provides that the variants can be modified at other positions and includes examples of such other positions. Based on Applicants' disclosure, the skilled artisan would be able to

make laccase variants that are modified at the recited positions as well as other positions. Should Applicants not be entitled to reap the benefits of this obvious extension of their inventive efforts?

Moreover, it is well known to persons of ordinary skill in the art that the amino acid sequence of enzymes from the same genus and species, e.g., *Myceliophthora thermophila*, are homologous.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

VI. The Rejection of Claim 2 under 35 U.S.C. 102

Claim 2 is rejected under 35 U.S.C. 102(b) and (e) as being anticipated by Pedersen et al. (U.S. Patent No. 5,925,554). This rejection is respectfully traversed.

Pedersen et al. disclose laccase variants comprising a mutation at one or more of the following positions: 13, 17, 23, 36, 46, 58, 73, 94, 136, 137, 145, 175, 176, 177, 214, 254, 260, 273, 286, 305, 384, 391, 403, 414, 416, 417, 441, 480, 486, 517, 543, 546, 547, 552, 563 and 569.

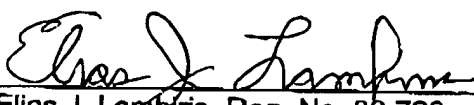
However, Pedersen et al. do not disclose the laccase variants of the present invention. Applicants therefore submit that this rejection has been overcome.

VII. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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